

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/822,815	04/13/2004	Fujio Sakurai	251891US0	3464
22850	7590 11/07/2006		EXAM	INER
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			OJINI, EZIAMA	RA ANTHONY
			ART UNIT	PAPER NUMBER
ALEXANDR	IA, VA 22314		3723	•

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		NT.				
	Application No.	Applicant(s)				
0.00	10/822,815	SAKURAI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Anthony Ojini .	3723				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	rith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI 36(a). In no event, however, may a will apply and will expire SIX (6) MOI e, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11 O	october 2006.					
2a) This action is FINAL . 2b) ☐ This	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for alloward	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.[D. 11, 453 ⁻ O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-9 is/are pending in the application.						
·— · · · · · · · · · · · · · · · · · ·	4a) Of the above claim(s) <u>1-6</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>7-9</u> is/are rejected.						
7)⊠ Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) acc		by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	tion is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attache	d Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	u (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
•						
	•					
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(Paper No(s)/Mail Date 5) Notice of Informal Patent Application				
3) Niformation Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5/25/04 11/15/05. 5/2-(- 0-4-	6) Other:					

DETAILED ACTION

Applicant's election with traverse of Group II, claims 7-9 in the reply filed on 10/11/6 is acknowledged. Claims 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/11/06. The traversal is on the ground(s) that "the claims of Group I are integrally linked with the claims of Group II. Final products and method for making said products are interdependent and should be examined together. There is a commonality that exists between Groups I and II. It is this technical feature that defines the contribution which each of the Groups taken as a whole make over the prior art, claims to the necessary process for producing the claimed product of the process must be examined along with claims to be elected invention M.P.E.P \$ 809". This is not found persuasive because the product-by-process limitation, wherein said "polishing layer having water-soluble particles dispersed in a polymer matrix" would not be expected to impart distinctive structural characteristics to the polishing pad made from mixed solution having water-soluble particles in a crosslinking agent, a polyisocyanate and/or an isocyanate terminated urethane prepolymer.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 3723

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, lines 1-3, the expression "wherein a tensile product for a tensile test at a temperature of 30°C and a pulling rate of 500 mm/min is 50 to 20,000 kgf/cm" is unclear what applicant is referring as a tensile product.

In claim 9, line 1-2, the expression "wherein a tensile product for a tensile test" lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7,8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hudson (5,976,000).

With respect to claim 7, Hudson discloses a polishing pad (50) comprising a polishing layer having water-soluble particles (70) dispersed in a polymers matrix (60) (see col. 3, lines 30-34 & col.4, lines 8-14 & fig. 3).

With respect to claim 8, Hudson discloses a polishing pad (50) wherein the volume of the soluble particles (70) is 10% to 50% by volume that is within the range of 0.5 to 70% as claimed by applicant (see col. 4, lines 45- 52).

Application/Control Number: 10/822,815

Art Unit: 3723

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hudson.

With respect to claim 9, Hudson fails to disclose a polishing pad comprising a polishing layer having water-soluble particles dispersed in a polymers matrix that shows a tensile product of 50 to 20,000 kgf/cm for a tensile tested at a temperature of 30°C and a pulling rate of 500 mm/min.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the polishing pad of Hudson with a polishing pad comprising a polishing layer having water-soluble particles dispersed in a polymers matrix that shows a tensile product of 50 to 20,000 kgf/cm for a tensile tested at a temperature of 30°C and a pulling rate of 500 mm/min so as to exhibit a stable polishing performance for a relatively long period of time without necessitating a dressing treatment.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hasegawa et al. Reinhardt et al., Swisher et al., Hirabayashi et al., Shukla disclose polishing pad soluble particules dispersed in a polymer matrix.

Art Unit: 3723

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 571 272 4492. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700

June J. Hailor

AO 10/25/06